1906 **RADIO BROADCASTING** **R Fessenden (USA)**

The first documented successful broadcasting of speech and music was conducted by Dr. Reginald Fessenden at Brant Rock, Mass., on Christmas Eve, 1906, utilizing a 50 kc radio-frequency alternator which produced about 1 kw of power and which was built by the General Electric Co., under the direction of Dr E F W Alexanderson. Modulation was accomplished by means of a microphone which is belived to have been water-cooled and which was connected in the antenna circuit. Clear reception was obtained at many locations including ships at sea.

Subsequently, Dr Lee de Forest conducted experimental broadcasting in 1907 from his laboratory in New York City, in 1908 from the Eiffel Tower in Paris, and in 1910 from the Metropolitan Opera House in New York City. These experiments, which were conducted with arc transmitters of about 500 watts power, modulated by microphones in the antenna-ground system, while successful, were handicapped by the high noise level inherent in arc transmitters.

SOURCE: 'AM and FM Broadcasting' by R F Guy *Proc. IRE* p 811 (May 1962)

SEE ALSO: 'History of radio to 1926' by G L Archer (New York: The American Historical Society) (1938)